

IN CLAIMS

Claims 1-20 (cancelled)

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21. (New) A payment system between a customer and a merchant that facilitates privacy and security of customer private data including bankcard data from merchant systems during a payment transaction to the merchant, comprising:

10 a. a merchant sales terminal adapted to wirelessly transmit a terminal identification and a payment amount for a specific sales transaction;

b. a wireless device of the customer adapted to receive from the sales terminal, the terminal identification and the payment amount specific to the sales transaction;

15 c. the wireless device connects to a third party central system and transfers to the central system, a data record having a unique wireless device identifier, the terminal identifier and the payment amount;

20 d. the central system using pre-stored customer bankcard data and merchant identification data, assembles and submits a payment authorization request to an automated clearing house (ACH) network, thus bypassing the merchant sales terminal and the merchant system from receiving customer private data.

22. (new) The system as in claim 21, further comprising:

25 the central system forwards a payment authorization notification to the merchant sales terminal, thus bypassing the merchant system from receiving the customer private data for the payment transaction.

23. (new) The system as in claim 21, further comprising:

30 the central system forwards a payment authorization notification to the customer wireless device, without need to get a printed paper notification from the merchant sale terminal.

24. (new) The system as in claim 21, further comprising:

the wireless device adapted with a payment function, that on being activated receives a wireless transmission of the terminal identification and the payment amount from the merchant sales terminal and sends the data record including at-least the terminal identification, the payment amount and the unique wireless device identification over a global network to the central system.

25. (new) The system as in claim 24, further comprising:

the unique wireless device identification is a combination of a pre-programmed device identification code and a customer entered card personal identification number (CPIN).

26. (new) The system as in claim 25, further comprising:

the customer by entering the CPIN into the wireless device, identifies a specific account data to be used for a payment transaction, wherein the customer having a plurality of pre-stored account data in the central system, each identified by a CPIN.

27. (new) The system as in claim 21, further comprising:

the central system maintains a transaction database cataloging each payment transaction by a transaction reference, date, time, an authorization reference, payment amount, customer identification and merchant identification.

28. (new) The system as in claim 27, further comprising:

a. a merchant refund terminal on the global computer network, wherein the merchant enters into the refund terminal a refund record, including at-least the payment transaction reference from a previous payment transaction, the merchant identification, a refund authorizing password, a refund amount, and sends the refund record to the central system;

b. the central system receives and verifies the elements of the refund record data with the transaction database, in particular verifies the refund amount is less than or equal to the payment amount, and creates a refund record including the merchant

account identification, refund amount and submits to the ACH and receives an approval, and forwarding that to the refund terminal and the customer wireless device.

29. (new) The system as in claim 27, further comprising:

5 a customer interface with the central system enabling the customer to enter account data, account identification code, personal identification code and enabling it to create a search query to retrieve payment and refund transactions by type of transaction, transaction date, and merchant identification.

10 30. (new) The system as in claim 27, further comprising:

a merchant interface with the central system enabling it to enter merchant identification, merchant account identification, terminal identification and enabling it create a search query to retrieve payment and refund transactions by type of transaction, by date, terminal identification, and transaction reference number.

15 31. (new) The system as in claim 21, further comprising:

the payment transaction record submitted to the ACH identifies a central system business entity bank for receiving payment amount from the ACH.

20 32. (new) The system as in claim 31, further comprising:

the central system submitting a merchant payment record to the ACH for transferring an aggregate amount from a plurality of the payment transactions into a merchant bank account, wherein the central system having a database relating the merchant terminal identification and a merchant bank account identification.

25 33. (new) A method that facilitates a private and secure payment transaction between a customer and a merchant without disclosing customer private data including bankcard data to the merchant during payment transactions, comprising the steps of:

30 a. transmitting by a merchant sales terminal, adapted with a means to wireless transmit, a sales terminal identification and a payment amount incident to a sales transaction;

b. receiving by a customer wireless device, adapted with an interface means to wirelessly receive, the merchant sales terminal identification and the payment amount specific to the sales transaction from the sales terminal;

c. connecting by the customer wireless device to a central system and transferring to the central system, a unique wireless device identifier, the sales terminal identification and the payment amount;

d. assembling and processing a payment transaction, by the central system, with an automated clearing house network, using customer bankcard data and merchant identification data that is pre-stored in the central system.

34. (new) The method as in claim 33, further comprising the steps of:

forwarding by the central system a payment authorization notification to the merchant sales terminal.

35. (new) The method as in claim 33, further comprising the steps of:

forwarding, by the central system, a payment authorization notification to the customer wireless device.

36. (new) The method as in claim 33, further comprising the steps of:

activating a payment function in the wireless device, receiving a wireless transmission of the terminal identification and a payment amount from the merchant sales terminal and sending a data record including at-least the terminal identification, the payment amount and a portable wireless device unique identification over a global network to the central system.

37. (new) The method as in claim 33, further comprising the steps of:

a. maintaining a transaction database by the central system, cataloging each payment transaction by a transaction reference, date, time, an authorization reference, payment amount, customer identification and merchant identification;

b. enabling a customer interface with the central system enabling it to enter account data, account identification code, personal identification code and enabling it to

create a search query to retrieve payment and refund transactions by type of transaction, transaction date, and merchant identification;

c. enabling a merchant interface with the central system enabling it to enter merchant identification, merchant account identification, terminal identification and enabling it to create a search query to retrieve payment and refund transactions by type of transaction, by date, terminal identification, and transaction reference number.

38. (new) A payment system between a customer and a merchant that facilitates privacy and security of customer private data including bankcard data from merchant systems during a payment transaction to the merchant, comprising:

a. a merchant sales terminal means for transmitting a terminal identification and a payment amount for a specific sales transaction and a customer wireless device means for receiving from the sales terminal, the terminal identification and the payment amount specific to the sales transaction, and a wireless device connection means for securely transferring to a central system, a unique wireless device identifier, the terminal identifier and the payment amount;

b. the central system means for assembling and processing a payment transaction with an automated clearing house network using pre-stored customer bankcard data and merchant identification data, thus bypassing merchant sales terminals and merchant systems from receiving customer private data during the payment transaction.

39. (new) The system as in claim 38, further comprising:

the central system means for forwarding a payment authorization notification to the merchant sales terminal and to the customer wireless device.

40. (new) The system as in claim 38, further comprising:

the central system means for maintaining a transaction database cataloging each payment transaction by a transaction reference, date, time, an authorization reference, payment amount, customer identification and merchant identification.